

REMARKS

Claims 1-10 are pending. No amendments have been made by way of the present submission, thus, no new matter has been added.

In view of the following remarks Applicants respectfully request that the Examiner withdraw all rejections and allow the currently pending claims.

Issues Under 35 U.S.C. §103(a)

The Examiner has rejected claims 1-10 under 35 U.S.C. §103(a) as being obvious over Buell, USP 3,309,363 (hereinafter referred to as Buell '363) in view of Deguchi et al., USP 5,395,742 (hereinafter referred to as Deguchi '742).

The Examiner has also rejected claims 1-10 under 35 U.S.C. §103(a) as being obvious over Crounse et al., USP 3,193,548 (hereinafter referred to as Crounse '548) in view of Deguchi '742).

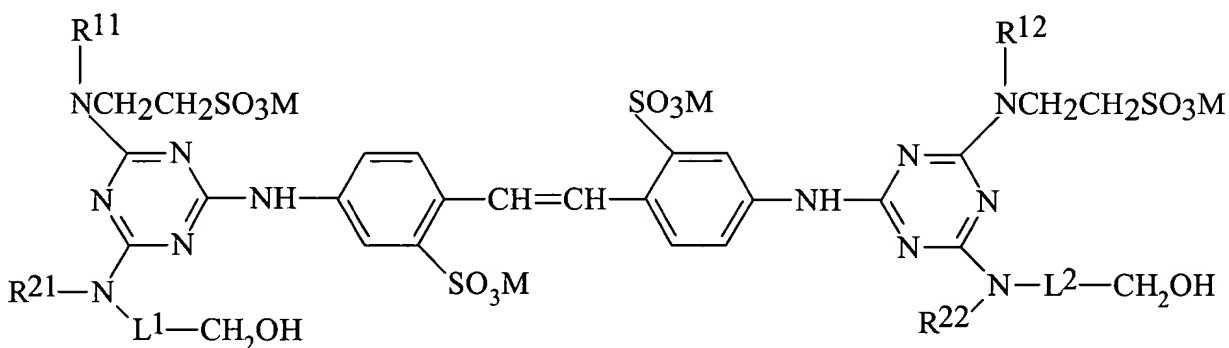
Applicants respectfully traverse each of the above rejections.

Applicants herein incorporate all arguments previously made.

The Examiner has maintained the same rejections of record, except that new claim 10 has been added to the rejection.

The Present Invention and Its Advantages

The present claims relate to a 4,4'-Bis(1,3,5-triazinylamino)stilbene-2,2'-disulfonic acid compound having the following formula:



wherein the functional groups are as defined in the claims. The compounds according to the present invention exhibit solubility characteristics which are advantageous when employed, for example, in an aqueous solution for processing photographic silver halide-containing materials.

Distinctions Between the Present Invention and Buell '363 in view of Deguchi '742

The combination of Buell '363 in view of Deguchi '742 fails to render the present claims *prima facie* obvious. Also, unexpected results exist with respect to the present invention compared to the primary reference of Buell '363 which rebut any hypothetical *prima facie* case of obviousness.

Applicants have previously submitted a Declaration under 37 CFR 1.132 to illustrate these unexpected results. In particular, the Declaration shows that the compound disclosed by Buell '363 fails to dissolve in water after a mixture of the compound in water is stirred for a period of 300 seconds at 40°C. In contrast, the presently claimed compounds are completely water soluble under these same conditions. Thus, the present compounds can advantageously be used in aqueous solutions for processing photographic silver halide-containing materials. The advantageous solubility properties of the presently claimed subject matter are completely unexpected in view of the cited art.

In the outstanding Office Action, the Examiner argues that the Declaration is unpersuasive. The Examiner states that "some insoluble remained in 300 sec", however, the Examiner believes that it is not clear what is the significance of the experiment and in what way it renders the present claims unobvious.

First, as discussed above, the highly water soluble properties of the present compound are completely unexpected in view of the cited art. These are advantageous in the art of processing photographic silver halide-containing materials. As such, the results are significant and unexpected and therefore render any hypothetical prima facie case of obviousness moot.

Second, to further explain the advantageous aspects of the present invention's water soluble properties, Applicants provide the following discussion. The diaminostilbene derivative of the present invention is, for example, employed in an aqueous solution for processing photographic silver halide-containing materials (see page 1, lines 11-12 of the present specification). In the aqueous solution for processing photographic silver halide-containing materials, amounts of all additives introduced into the solution are strictly controlled so that the resulting photographic image can be produced under pre-determined conditions. Some additives are very sensitive to ambient temperature conditions, and the photographic processing solution is generally prepared at approximately 40°C.

In the industry, it is desired that the processing solution be prepared as quickly as possible so as to shorten the period of time required to prepare the processing solution. Of course, in the commercial industry, an increase in this period of time results in higher production costs. Accordingly, it is very important to dissolve the additives as rapidly as possible for the photographic processing solution in an aqueous solution adjusted to 40°C.

Additionally, there is the case where the photographic processing solution is kept overnight at a very low temperature,

such as 0°C. If the additive precipitates in the solution under such cold temperature conditions, the concentrations of the processing solution will vary. Variation in the concentration of the processing solution will cause variation in the quality of the processed photographic image.

Therefore, it is important that the additive rapidly dissolve in an aqueous solution at 40°C and not precipitate when the solution is maintained at a low temperature, such as 0°C. An additive that can meet these requirements is therefore advantageous compared to an additive which does not meet these requirements.

With the above discussion in mind, Applicants direct the Examiner's attention to the present specification at page 28. Experimental data is provided which indicates that the inventive compounds rapidly dissolve in an aqueous solution at 40°C. These compounds also do not precipitate (do not form a deposit) at 0°C. Thus, the present compounds satisfy the two advantageous properties discussed above.

Applicants now direct the Examiner's attention to the comparative compounds (a and b) also discussed at page 28 of the present specification. The solubility properties of these comparative compounds (which are structurally analogous to the inventive compounds) are very low. For instance, a portion of the

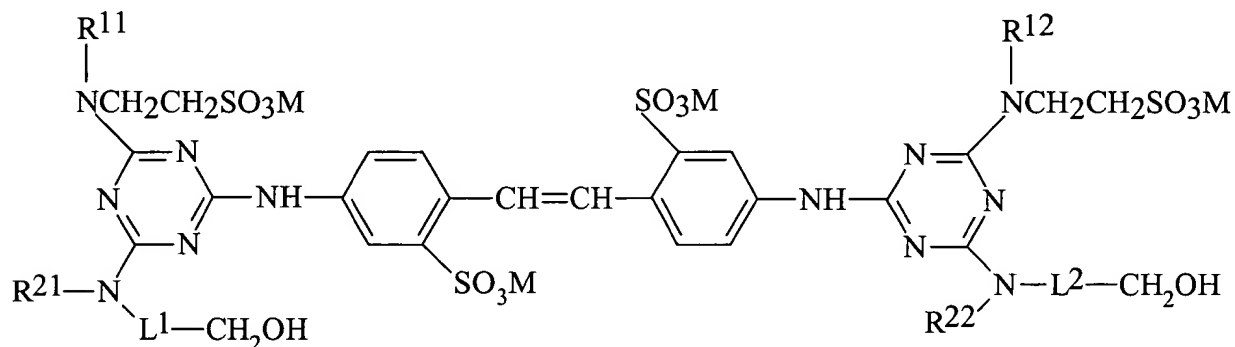
added compound remains undissolved even after being placed in the aqueous medium for 300 seconds. As discussed above, such a long dissolution time is disadvantageous in the industry. Precipitation at 0°C was not tested since a deposit was already present at 40°C.

Bearing in mind the above, Applicants now request that the Examiner reconsider the results of the previously submitted Declaration. Similar to the results of comparative examples a and b at page 28 of the present specification, the compound of Buell '363 shows the same disadvantageous solubility characteristics. For instance, the compound of Buell '363 shows poor solubility in an aqueous medium adjusted to 40°C even after 300 seconds. The difference in the solubility properties of the present compounds compared to the compound of Buell '363 is completely unexpected. Therefore, any hypothetical *prima facie* case of obviousness is rendered moot. Reconsideration and withdrawal of this rejection is requested.

Distinctions Between the Present Invention and Crounse '548 in view of Deguchi '742

The combination of Crounse '548 in view of Deguchi '742 fails to render the present claims *prima facie* obvious. In the outstanding Office Action, the Examiner admits that the diaminostilbene compound of Crounse '548 lacks a sulfoalkylamino

side chain in addition to the hydroxyalkoxyalkylamino side chain. Moreover, the Examiner admits that Deguchi '742 lacks a hydroxyalkoxyalkylamino side chain in addition to the sulfoalkylamino side chain. However, the failure in the disclosures of these two references does not amount to motivation to assemble the presently claimed compound (formula reproduced for convenience below):



The Examiner has previously stated (Paper #4) that the starting materials and the final products of the Crounse '548 and Deguchi '742 references are analogous in that they both employ cyanuric halide, substituted amines and 2,2-diaminostilbene sulfonic acid. Based upon these disclosures, the Examiner believes that motivation exists to prepare the presently claimed compounds. Applicants disagree with this rationale. The similarity in starting materials is irrelevant since there exists no motivation to replace different

substituents to achieve the present compounds. Moreover, there is no suggestion in either reference that such a hypothetical compound would exhibit the advantageous solubility properties exhibited by the presently claimed compounds.

Later, the Examiner asserts (Paper #6) that Crounse '548 discloses a hydroxyalkoxyalkylamino group on triazine with an equivalency teaching of one or more hydroxyl on alkyl amino group. Moreover, the secondary reference of Deguchi '742 discloses both sulfonyl amino and hydroxyalkylamino groups on the triazine ring. The Examiner asserts that based upon this alleged equivalency, there is motivation to combine the two references with the expectation of obtaining the presently claimed compounds with the utility taught.

Applicants point out that the present compounds have a triazine ring bearing both a sulfonyl amino group and a hydroxyalkoxyalkylamino side chain (or a hydroxyalkylamino having a hydroxyl or hydroxyalkyl on the alkyl moiety). Crounse '548 disclose a hydroxyalkoxyalkylamino side chain, but never disclose one or more hydroxyl on alkyl amino groups. Accordingly, the Examiner's assertion of equivalency and therefore motivation are flawed. As such, there exists no valid *prima facie* case of obviousness.

Moreover, Applicants submit that they have compared the presently claimed subject matter with the closest exemplified prior art, that is, the compound of Buell '363. Applicants have shown unexpectedly advantageous properties according to the present compounds. Since Crounse '548 represents less relevant art, any hypothetical *prima facie* case of obviousness based upon Crounse '548 is moot. Reconsideration and withdrawal of this rejection are requested.

It is unnecessary to test the compounds of Crounse '548 since the compound of Buell '363 has already been tested. The comparative showing need not compare the claimed invention with all of the cited prior art, In re Fenn et al., 208 USPQ 470 (CCPA 1981), but only with the closest prior art. In re Holladay, 199 USPQ 516 (CCPA 1978); see also In re Merchant, 197 USPQ 785 (CCPA 1978); see also In re Wood et al., 202 USPQ 171 (CCPA 1979). In the case of chemical compounds, this means only the compound or compounds closest structurally thereto must be tested.

In view of the above, Applicants respectfully submit that the present claims define subject matter which is allowable over the cited art. As such, Applicants request that the Examiner withdraw all rejections and allow the currently pending claims.

If the Examiner has any questions or comments, please do not hesitate to contact Craig A. McRobbie, Registration No. 42,874 at the offices of Birch, Stewart, Kolasch & Birch, LLP.

Pursuant to 37 C.F.R. § 1.17 and 1.136(a), Applicants respectfully petition a three (3) month extension of time for filing a response in connection with the present application. An extension of three months (\$930.00) is attached hereto.

If necessary, the Commissioner is hereby authorized in this, concurrent, and further replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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